

United States Environmental Protection Agency Office of Environmental Measurement & Evaluation 11 Technology Drive North Chelmsford, MA 01863-2431

Laboratory Results

September 11, 2017

Danielle Gaito - Mail Code OEP06-4 Evan Lewis - Mail Code OEP06-1 US EPA New England R1

Project No: 17080029

Project: Merrymeeting River - New Durham, NH

Analysis: Ammonia as N EPA Chemist: Bhavita Patel

Date Samples Received by the Laboratory: 08/15/2017

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-INGAMMOO.

This SOP is based on the Lachat method 10-107-06-1-X and EPA method 350.1 "Determination of Ammonia Nitrogen by Semi Automated Colorimetry, Rev 2.0, August 1993.

Samples were digested using Lachat micodistallation unit. Samples were analyzed on Lachat Automated Ion Analyzer.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

If you have any questions please call me at.

Sincerely,

Qualifiers: Page 2 of 6

- **RL** = Reporting limit
- **ND** = Not Detected above Reporting limit
- **NA** = Not Applicable due to high sample dilutions or sample interferences
- **NC** = Not calculated since analyte concentration is ND.
- J = Estimated value
- **J1** = Estimated value due to MS recovery outside accceptance criteria
- **J2** = Estimated value due to LFB result outside acceptance criteria
- **J3** = Estimated value due to RPD result outside acceptance criteria
- **J4** = Estimated value due to LCS result outside acceptance criteria
- \mathbf{E} = Estimated value exceeds the calibration range
- L = Estimated value is below the calibration range
- **B** = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
- \mathbf{R} = No recovery was calculated since the analyte concentration is greater than four times the spike level.
- ${f P}={f The}$ confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
- C =The identification has been confirmed by GC/MS.
- \mathbf{A} = Suspected Aldol condensation product.
- N =Tentatively identified compound.

US ENVIRONMENTAL PROTECTION AGENCY NEW ENGLAND LABORATORY

Merrymeeting River - New Durham, NH

Ammonia as N

Matrix: Water

Sample Number	Lab ID	Collected	Distilled	Analysis	Concentration ug/L	RL ug/L	Qualifier
Blank Comments:			08/29/2017	08/29/2017	ND	66	
PM01 Comments:	AB69062	08/15/2017	08/29/2017	08/29/2017	78	66	
MM1 Comments:	AB69063	08/15/2017	08/29/2017	08/29/2017	ND	66	
PM02 Comments:	AB69064	08/15/2017	08/29/2017	08/29/2017	86	66	
MM2 Comments:	AB69065	08/15/2017	08/29/2017	08/29/2017	ND	66	
MM3 Comments:	AB69066	08/15/2017	08/29/2017	08/29/2017	ND	66	
DUP 3 Comments:	AB69067	08/15/2017	08/29/2017	08/29/2017	ND	66	

US ENVIRONMENTAL PROTECTION AGENCY NEW ENGLAND LABORATORY

Merrymeeting River - New Durham, NH

MATRIX SPIKE (MS) Results

		SPIKE	SAMPLE	MS	MS	QC
		ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
SAMPLE ID	PARAMETER	ug/L	ug/L	ug/L	REC	(% REC)
AB69064	Ammonia as N	2000	86	1960	94	85 - 115

Comments:

Laboratory Duplicate Results

		SAMPLE	SAMPLE DUP	PRECISION	QC
		RESULT	RESULT	RPD	LIMITS
SAMPLE ID	PARAMETER	ug/L	ug/L	%	(%RPD)
AB69064	Ammonia as N	86	ND	NC	20

US ENVIRONMENTAL PROTECTION AGENCY NEW ENGLAND LABORATORY

Merrymeeting River - New Durham, NH

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT	LFB	LFB	QC
	SPIKED	RESULT	RECOVERY	LIMITS
	ug/L	ug/L	%	%
Ammonia as N	2000	1890	94	90 - 110

Samples in Batch: AB69062, AB69063, AB69064, AB69065, AB69066, AB69067

REGION 1

CHAIN OF CUSTODY RECORD

PROJ. I	NO.	PROJEC	TNA	ME				14 01 003				7	7	7	7 7	7	/		
17080029 Merly Meeting 2017						NO.			/	/ /	/ ,	/ /	///	/ /	,				
SAMPLERS: (Signature)					OF														
I. Danbrosk; E. Lewis					CON-	REMAR								REMARKS					
STA. NO.	DATE	TIME	COMP.	GRAB		STATIO	N LOCATION	TAINERS	J.	4/5	S/1	\\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Š	Zy J			Windows American Confession of the Confession of		
PMO1	8/15/17	10:14		/				2											
MMI		10:12		/				て											
PM02		10:32		/				2					\prod						
MM2		16:43		/				2											
MM3		10:58		/				2											
Rp 3		10:43		/				2	T			1							
		·																	
													T						
Relinquish	ed by: (Signature))		Date	/Time	Received by: (Signatu	re)	Rel	inquis	hed	by: (Signa	ture)		Date	Time	Received by: (Signature)	
GC.				18	5/15/17	13:22									_				
Relinquished by: (Signature) Date / Time Received by: (Signature)				re)	Relinquished by: (Signature) Date / Time Received by: (S						Received by: (Signature)								
Relinquish	Relinquished by: (Signature) Date / Time Received for Laboratory by: (Signature) Distribution: Original Accompanies Shipment/Copy to Coordinator Field Files Date / Time Remarks I and 24°C 7NL pickined LZ pH w/ H25°B4																		
	17080029			, UI	rymer MCCO	mheulet 9	hipment: Copy to Coordi	1708002		JI				L			ing most of Delta capturin		

17080029 TSS 17080029 OPHOS 17080029 TP

17080029 \$TNL 17080029 AMMO

1- 20229